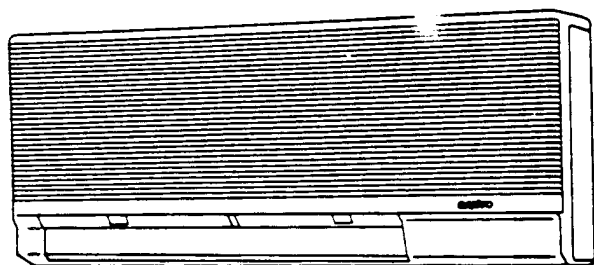
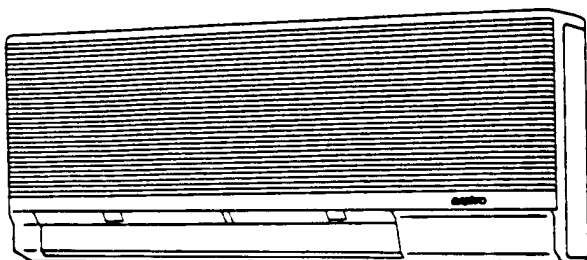


CM1812 / KMS0912(×2)

SPLIT SYSTEM AIR CONDITIONER

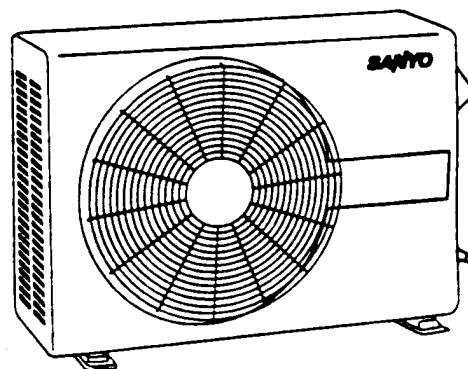
Indoor Unit



KMS0912



Outdoor Unit



CM1812

1. OPERATING RANGE

CM1812 / KMS0912(×2)

Temperature	Indoor Air Intake Temp.	Outdoor Air Intake Temp.
Maximum	95°F DB / 71°F WB	115°F DB
Minimum	67°F DB / 57°F WB	67°F DB

IMPORTANT!

Please Read Before Starting

This air conditioning system meets strict safety and operating standards. As the installer or service person, it is an important part of your job to install or service the system so it operates safely and efficiently.

For safe installation and trouble-free operation, you must:

- Carefully read this instruction booklet before beginning
- Follow each installation or repair step exactly as shown
- Observe all local, state, and national electrical codes
- Pay close attention to all danger, warning, and caution notices given in this manual



DANGER:

This symbol warns of an immediate hazard which will result in severe personal injury or death.



WARNING:

This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.



CAUTION:

This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

If Necessary, Get Help

These instructions are all you need for most installation sites and maintenance conditions. If you require help for a special problem, contact our sales/service outlet or your certified dealer for additional instructions.

In Case of Improper Installation

The manufacturer shall in no way be responsible for improper installation or maintenance service, including failure to follow the instructions in this document.

SPECIAL PRECAUTIONS

When Wiring

ELECTRICAL SHOCK CAN CAUSE SEVERE PERSONAL INJURY OR DEATH. ONLY A QUALIFIED, EXPERIENCED ELECTRICIAN SHOULD ATTEMPT TO WIRE THIS SYSTEM.

- Do not supply power to the unit until all wiring and tubing are completed or reconnected and checked.
- Highly dangerous electrical voltages are used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause accidental injury or death.
- Ground the unit following local electrical codes.

- Connect all wiring tightly. Loose wiring may cause overheating at connection points and a possible fire hazard.

When Transporting

Be careful when picking up and moving the indoor and outdoor units. Get a partner to help, and bend your knees when lifting to reduce strain on your back. Sharp edges or thin aluminum fins on the air conditioner can cut your fingers.

When Installing...

...In a Ceiling or Wall

Make sure the ceiling/wall is strong enough to hold the unit's weight. It may be necessary to construct a strong wood or metal frame to provide added support.

...In a Room

Properly insulate any tubing run inside a room to prevent "sweating" that can cause dripping and water damage to walls and floors.

...In Moist or Uneven Locations

Use a raised concrete pad or concrete blocks to provide a solid, level foundation for the outdoor unit. This prevents water damage and abnormal vibration.

...In an Area with High Winds

Securely anchor unit down with bolts and metal frame. Provide a suitable air baffle.

...In a Snowy Area (for Heat Pump-type Systems)

Install the outdoor unit on a raised platform that is higher than drifting snow. Provide snow vents.

When Connecting Refrigerant Tubing

- Keep all tubing runs as short as possible.
- Use the flare method for connecting tubing.
- Apply refrigerant lubricant to the matching surfaces of the flare and union tubes before connecting them, then tighten the nut with a torque wrench for a leak-free connection.
- Check carefully for leaks before starting the test run.

NOTE:

Depending on the system type, liquid and gas lines may be either narrow or wide. Therefore, to avoid confusion the refrigerant tubing for your particular model is specified as either "narrow" or "wide" rather than as "liquid" or "gas."

When Servicing

- Turn the power OFF at the main power box (mains) before opening the unit to check or repair electrical parts.
- Keep your fingers and clothing away from any moving parts.
- Clean up the site after you finish, remembering to check that no scraps or bits of wiring have been left inside the unit being serviced.

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SERVICE MANUAL

CM1812 / KMS0912(×2)

(Basic Information)

2. SPECIFICATIONS

Unit Specifications

Model No.		Outdoor unit	CM1812	
		Applicable indoor unit	KMS0912	
Performance			Cooling	
	No. of indoor units		1	2
	Capacity	BTU/h	9,000 / 8,800	18,000 / 17,600
		kW	2.64 / 2.58	5.27 / 5.16
Electrical Rating	Phase, Frequency		Hz	Single, 60
	Voltage rating		V	230 / 208
	Available voltage range		V	187 to 253
	Running amperes		A	8.6 / 9.0
	Power input		W	1,860 / 1,820
	Power factor		%	94 / 97
	Starting amperes		A	27 × 2
	S. E. E. R.		BTU/Wh	10.0 / 10.0
Features	Fan speeds		1	
	Compressor		Rotary	
	Refrigerant amount charged at shipment		lbs. (kg)	R-22: 2.16 × 2 (980 × 2)
	Refrigerant control		Capillary tube	
	Operation sound		dB-A	54
	Refrigerant tubing connections		Flare type	
	Max. allowable tubing length at shipment		ft. (m)	33 (10)
	Limit of tubing length		ft. (m)	50 (15)
	Limit of elevation difference between the 2 units		ft. (m)	23 (7)
	Refrigerant tube o.d.	Narrow tube	in. (mm)	1/4 (6.35)
		Wide tube	in. (mm)	3/8 (9.52)
Refrigerant tube kit		Optional		
Dimensions & Weight	Height		in. (mm)	24-13/16 (630)
	Width		in. (mm)	32-11/16 (830)
	Depth		in. (mm)	12-13/32 (315)
	Net weight		lbs. (kg)	130 (58.96)
	Shipping volume		cu. ft. (cu. m)	10.34 (0.96)
	Shipping weight (Approx.)		lbs. (kg)	136.4 (61.9)

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Remarks: Rating conditions are: Outside air temperature 95°F DB/75°F WB

Indoor unit entering air temperature 80°F DB/67°F WB

Applicable indoor unit

Model No.			KMS0912
Type			Wall-mounted
Performance			Cooling
	Capacity	BTU/h	9,000 / 8,800
		kW	2.64 / 2.58
	Air circulation (High)		cu. ft./min. 220 / 210
Electrical Rating	Moisture removal (High)		pints/h 2.2 / 2.1
	Phase, Frequency		Hz Single, 60
	Voltage rating		V 230 / 208
	Available voltage range		V 187 to 253
Features	Controls		Microprocessor
	Control unit		Wireless remote control unit
	Temperature control		IC thermostat
	Timer		ON/OFF 24-hours & Program
	Fan speeds		3
	Air deflector		Horizontal / Vertical
	Air filter		Manual / Manual
	Operation sound		Washable, easy access
	Refrigerant tubing connections		Flare type
	Refrigerant tube o.d.	Narrow tube in. (mm)	45 / 35 / 30
		Wide tube in. (mm)	1/4 (6.35)
	Refrigerant tube kit		3/8 (9.52)
Dimensions & Weight	Accessories		Optional
			Hanging wall bracket
	Height	in. (mm)	13-19/32 (345)
	Width	in. (mm)	31-1/2 (800)
	Depth	in. (mm)	7-3/32 (180)
	Net weight	lbs. (kg)	24 (11)
	Shipping volume		cu. ft. (cu. m) 3.3 (0.093)
	Shipping weight		lbs. (kg) 29 (13)

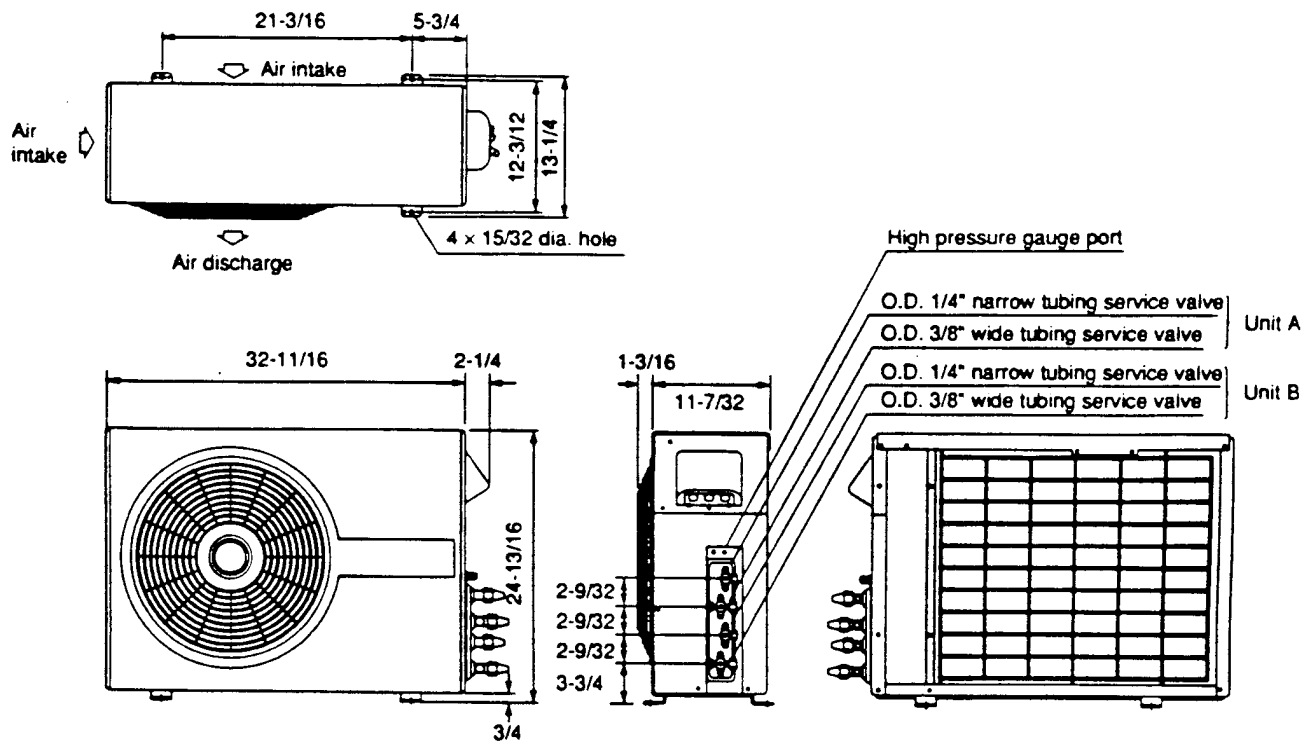
DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Remarks: Rating conditions are: Outside air temperature 95°F DB/75°F WB

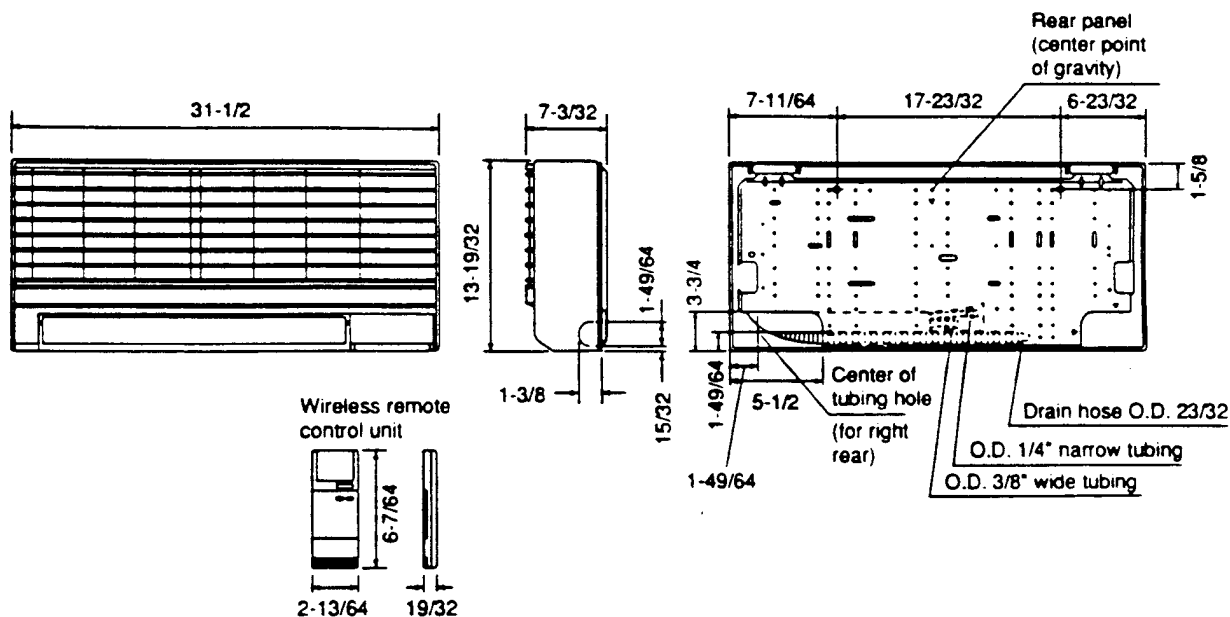
Indoor unit entering air temperature 80°F DB/67°F WB

3. DIMENSIONAL DATA

Outdoor Unit: CM1812



Indoor Unit: KMS0912



4. COOLING CAPACITY

230V

CM1812 / KMS0912×1

Rating Capacity: 9,000 BTU/H			Air Flow Rate: 220 CFM				
Evaporator		Condenser					
Ent. Temp. °F/(°C)		Ambient Temp. °F/(°C)					
WB	DB		75 (23.9)	85 (29.4)	95 (35.0)	105 (40.6)	115 (46.1)
59 (15.0)		TC	8,910	8,510	8,100	7,640	7,020
		kW	0.65	0.71	0.77	0.83	0.92
	72 (22.2)	SHC	6,300	6,090	5,870	5,640	5,330
	76 (24.4)	SHC	7,040	6,830	6,620	6,380	6,070
	80 (26.7)	SHC	7,820	7,600	7,390	7,160	6,850
	84 (28.9)	SHC	8,560	8,340	8,100	7,640	7,020
	88 (31.1)	SHC	8,910	8,510	8,100	7,640	7,020
63 (17.2)		TC	9,220	8,930	8,580	8,110	7,470
		kW	0.65	0.72	0.78	0.85	0.94
	72 (22.2)	SHC	5,350	5,210	5,040	4,820	4,530
	76 (24.4)	SHC	6,090	5,950	5,780	5,560	5,270
	80 (26.7)	SHC	6,870	6,730	6,560	6,340	6,040
	84 (28.9)	SHC	7,610	7,470	7,300	7,080	6,780
	88 (31.1)	SHC	8,350	8,210	8,040	7,820	7,470
67 (19.4)		TC	9,470	9,320	*9,000	8,510	7,920
		kW	0.66	0.72	0.79	0.86	0.96
	72 (22.2)	SHC	4,370	4,300	4,160	3,950	3,700
	76 (24.4)	SHC	5,110	5,040	4,900	4,690	4,440
	80 (26.7)	SHC	5,890	5,820	5,680	5,460	5,210
	84 (28.9)	SHC	6,630	6,560	6,420	6,200	5,960
	88 (31.1)	SHC	7,370	7,300	7,160	6,950	6,700
71 (21.7)		TC	9,770	9,600	9,360	8,940	8,420
		kW	0.67	0.73	0.80	0.88	0.98
	72 (22.2)	SHC	3,360	3,290	3,200	3,030	2,830
	76 (24.4)	SHC	4,100	4,030	3,940	3,770	3,570
	80 (26.7)	SHC	4,880	4,810	4,710	4,550	4,340
	84 (28.9)	SHC	5,620	5,550	5,450	5,290	5,090
	88 (31.1)	SHC	6,360	6,290	6,200	6,030	5,830
75 (23.9)		TC	9,950	9,850	9,630	9,290	8,910
		kW	0.68	0.74	0.81	0.90	1.00
	76 (24.4)	SHC	3,090	3,050	2,970	2,850	2,720
	80 (26.7)	SHC	3,870	3,830	3,750	3,630	3,490
	84 (28.9)	SHC	4,610	4,570	4,490	4,370	4,230
	88 (31.1)	SHC	5,350	5,310	5,230	5,110	4,980

TC: Total Cooling Capacity (BTU/H)
 SHC: Sensible Heat Capacity (BTU/H)
 kW: Compressor Input (kW)

Remarks: Rating conditions (* mark) are: Outside ambient temperature 95°F DB
 Indoor unit entering air temperature 80°F DB/67°F WB

Rating Capacity: 8,800 BTU/H			Air Flow Rate: 210 CFM				
Evaporator		Condenser					
Ent. Temp. °F/(°C)		Ambient Temp. °F/(°C)					
WB	DB		75 (23.9)	85 (29.4)	95 (35.0)	105 (40.6)	115 (46.1)
59 (15.0)		TC kW	8,710 0.64	8,320 0.70	7,920 0.76	7,470 0.82	6,860 0.90
	72 (22.2)	SHC	6,150	5,940	5,730	5,500	5,190
	76 (24.4)	SHC	6,860	6,650	6,440	6,210	5,910
	80 (26.7)	SHC	7,610	7,400	7,190	6,960	6,650
	84 (28.9)	SHC	8,320	8,110	7,900	7,470	6,860
	88 (31.1)	SHC	8,710	8,320	7,920	7,470	6,860
63 (17.2)		TC kW	9,010 0.65	8,730 0.71	8,390 0.77	7,930 0.84	7,300 0.92
	72 (22.2)	SHC	5,230	5,090	4,930	4,710	4,420
	76 (24.4)	SHC	5,950	5,810	5,640	5,420	5,130
	80 (26.7)	SHC	6,690	6,550	6,390	6,170	5,880
	84 (28.9)	SHC	7,410	7,270	7,100	6,880	6,590
	88 (31.1)	SHC	8,120	7,980	7,820	7,600	7,300
67 (19.4)		TC kW	9,260 0.65	9,110 0.71	*8,800 0.78	8,320 0.85	7,740 0.94
	72 (22.2)	SHC	4,280	4,210	4,070	3,860	3,620
	76 (24.4)	SHC	4,990	4,930	4,790	4,580	4,330
	80 (26.7)	SHC	5,740	5,670	5,540	5,320	5,080
	84 (28.9)	SHC	6,450	6,390	6,250	6,040	5,790
	88 (31.1)	SHC	7,170	7,100	6,960	6,750	6,510
71 (21.7)		TC kW	9,550 0.66	9,390 0.72	9,150 0.79	8,740 0.87	8,230 0.96
	72 (22.2)	SHC	3,300	3,240	3,140	2,980	2,780
	76 (24.4)	SHC	4,020	3,950	3,860	3,690	3,490
	80 (26.7)	SHC	4,760	4,700	4,600	4,400	4,240
	84 (28.9)	SHC	5,480	5,410	5,320	5,150	4,960
	88 (31.1)	SHC	6,190	6,130	6,030	5,870	5,670
75 (23.9)		TC kW	9,730 0.67	9,630 0.73	9,420 0.80	9,080 0.89	8,710 0.99
	76 (24.4)	SHC	3,040	3,000	2,920	2,800	2,670
	80 (26.7)	SHC	3,790	3,750	3,670	3,550	3,420
	84 (28.9)	SHC	4,500	4,460	4,390	4,270	4,140
	88 (31.1)	SHC	5,210	5,180	5,100	4,980	4,850

TC: Total Cooling Capacity (BTU/H)

SHC: Sensible Heat Capacity (BTU/H)

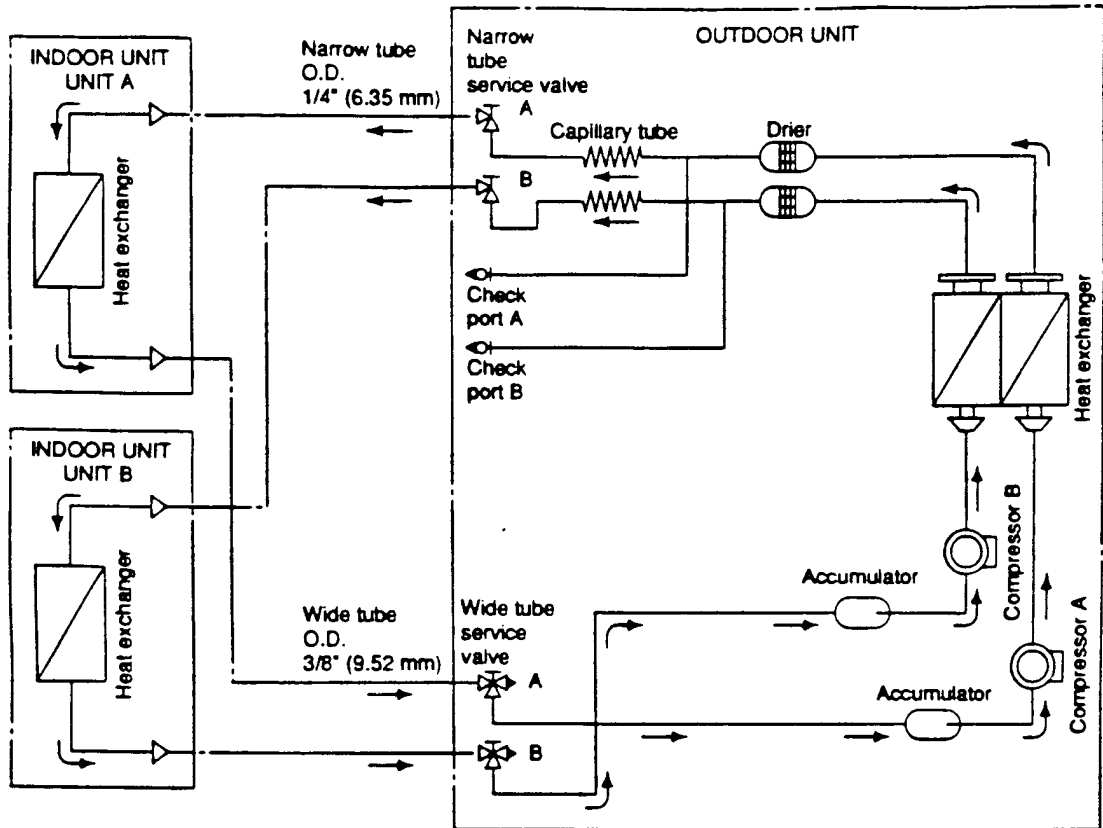
kW: Compressor Input (kW)

Remarks: Rating conditions (* mark) are: Outside ambient temperature 95°F DB

Indoor unit entering air temperature 80°F DB/67°F WB

5. REFRIGERANT FLOW DIAGRAM

CM1812 / KMS0912(x2)



6. ELECTRICAL DATA

● Electrical Characteristics

CM1812 / KMS0912×1

Performance at 230/208V – 1ø – 60Hz		Indoor Unit	Outdoor Unit		Complete Unit
		Fan Motor	Fan Motor	Compressor	
Rating Conditions	A	0.15 / 0.14	0.47 / 0.47	3.68 / 3.89	4.3 / 4.5
	W	34 / 28	110 / 100	786 / 782	930 / 910
Locked-Rotor Amperes	A	0.19 / 0.18	0.72 / 0.65	27	—

Remarks: Rating conditions are: Outside air temperature 95°F DB/75°F WB
Indoor unit entering air temperature 80°F DB/67°F WB

CM1812 / KMS0912×2

Performance at 230/208V – 1ø – 60Hz		Indoor Units	Outdoor Unit		Complete Unit
			Fan Motor	Compressor	
Rating Conditions	A	0.30 / 0.28	0.47 / 0.47	7.83 / 8.25	8.6 / 9.0
	W	68 / 56	110 / 100	1,682 / 1,664	1,860 / 1,820
Locked-Rotor Amperes	A	0.19 × 2 / 0.18 × 2	0.72 / 0.65	27 × 2	—

Remarks: Rating conditions are: Outside air temperature 95°F DB/75°F WB
Indoor unit entering air temperature 80°F DB/67°F WB

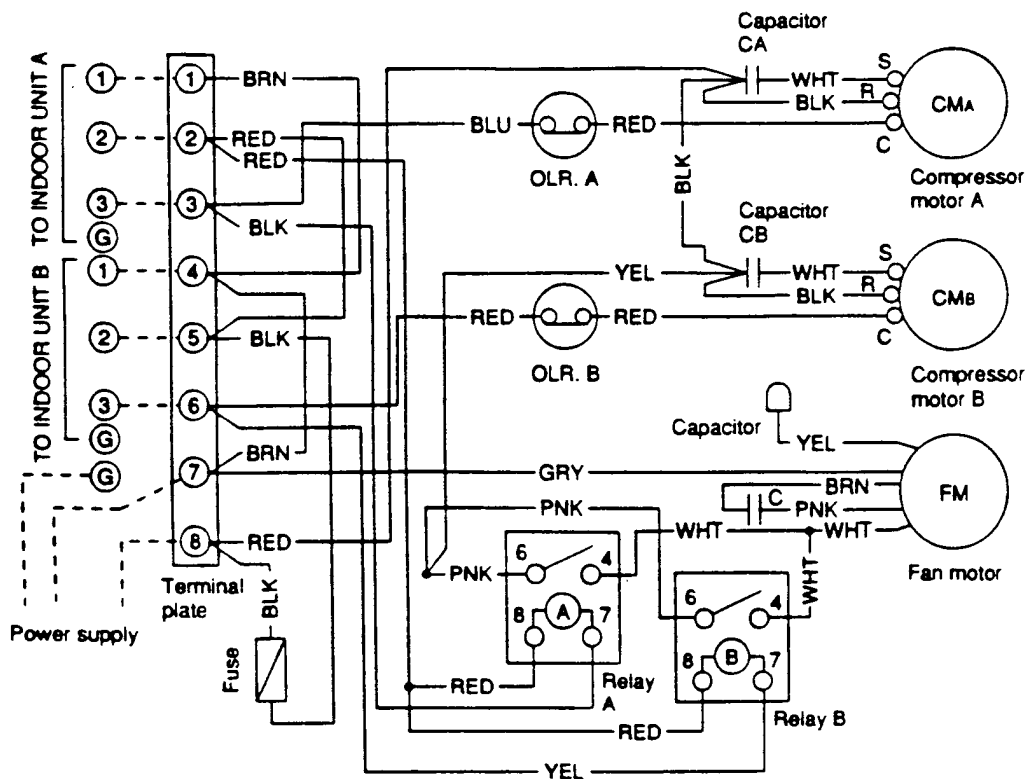
● Electrical Wiring Diagram

Outdoor Unit: CM1812



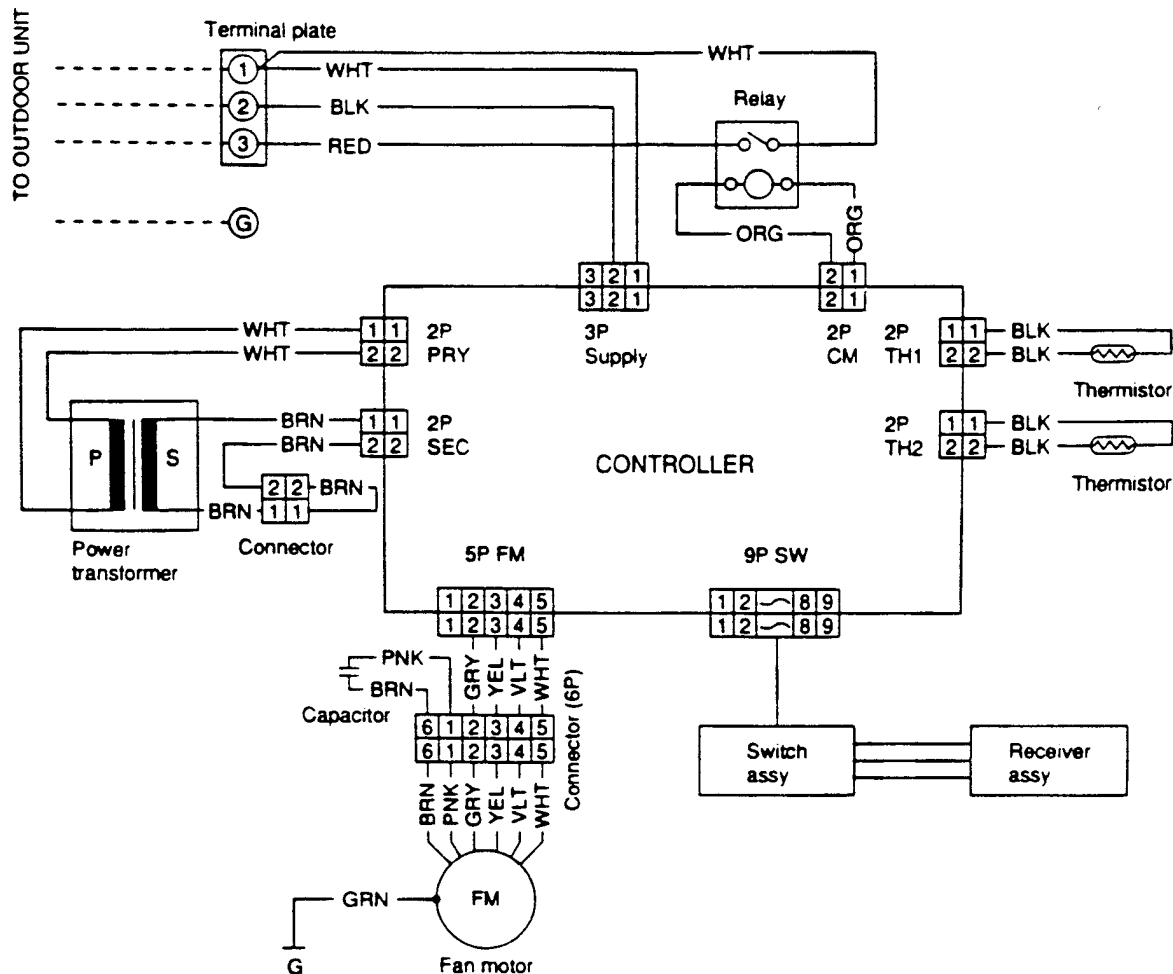
WARNING:

To avoid electrical shock hazard, be sure to disconnect power before checking, servicing and/or cleaning any electrical parts.



**WARNING:**

To avoid electrical shock hazard, be sure to disconnect power before checking, servicing and/or cleaning any electrical parts.



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